

ABSTRACT OF DISCLOSURE

A method and system is provided to induce mild hypothermia in a patient through
5 controlled heating of the preoptic anterior hypothalamus (POAH) in conjunction with
cooling of patient's body. The system employs an ultrasound transducer that may be
positioned extracorporeally to a patient skull for emitting ultrasound energy to the POAH.
The ultrasound energy heats the POAH to inhibit thermoregulatory responses of the body
such that a cooling means may more effectively cool bodily tissue in order to reduce a
10 patient's core body temperature. Feedback sensors may be positioned at various locations
on the patient in order to monitor the patient's core body temperature. A control apparatus
included with the system controls the amount of heat the POAH receives and the amount
of cooling the body receives based on the feedback signals from the sensors.